STRATEGIC OPTIONS FOR A MIGRATION AND FAMILY ORIENTED DEMOGRAPHIC POLICY IN GERMANY AND EUROPE[1]

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Zusammenfassung

Deutschland betreibt seit dem Zweiten Weltkrieg keine Bevölkerungspolitik mehr - mit einer wesentlichen Ausnahme: Die Zuwanderungspolitik in Deutschland ist eine kompensatorische Bevölkerungspolitik, mit der ein immer größerer Anteil der durch Tod ausgeschiedenen Generationen durch Zuwanderungen aus dem Ausland ersetzt statt durch Geburten erneuert wird. Der Generationenersatz durch Zuwanderungen ist sowohl aus wirtschaftlicher als auch aus gesellschaftspolitischer Sicht ungünstiger als die alternative Strategie einer Generationenerneuerung durch eine Erhöhung der Geburtenrate. Bei hohen Zuwanderungen verringert sich das Qualifikationsniveau der Bevölkerung, und es kommt zu Einbußen beim Wachstum des Pro-Kopf-Einkommens, während gleichzeitig die Integrationskosten steigen. Die Strategie des Generationenersatzes durch Zuwanderungen ist auch aus internationaler Sicht problematisch. Denn wenn Zuwanderungen für das aufnehmende Land ökonomische Vorteile bringen, drohen diese Vorteile den Herkunftsländern verloren zu gehen. Entscheidend ist jedoch, daß auch Einwanderer geboren, erzogen und ausgebildet werden müssen, bevor sie im Wettbewerb um die Besten in ein anderes Land einwandern können. Es wäre eine moralisch durch nichts zu rechtfertigende Strategie, wenn die reichen Länder auf Dauer ihre demographischen Defizite auf Kosten der armen ausgleichen und mit den Mitteln der Migrationspolitik eine Art demographischen Kolonialismus etablieren würden.

Summary

Since World War II, Germany has not had any explicit population policy, with one key exception: Germany's approach toward immigration represents a surrogate population policy in which an ever-increasing proportion of the natural population wastage from

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deaths, rather than being renewed by a similar number of births, is instead replaced by immigration.

Replacement by immigration is a more problematic course to take than the alternative strategy of natural replenishment via a higher birth rate, particularly from the standpoints of economic and social policy. This is because a high immigration rate tends to lower the population's overall educational level, and to act as a damper on growth in per capita income but to push up integration costs. The replacement strategy also raises problems in an international context. The danger is that whatever economic benefits accrue to a country taking in immigrants will be benefits forfeited by their countries of origin. The crux is that immigrants first have to be born, raised and educated somewhere before they can move to another country that is eager to take the best and the smartest. There can be no moral justification whatsoever for a strategy in which rich countries persistently make up their own demographic deficiencies at poorer countries' expense, thus establishing a form of demographic colonialism by means of immigration policy.

1   Introduction

Since World War II, Germany has ceased to pursue any explicit population policy. How profound the historic hiatus was becomes clear in the fact that there is now not a single law, ordinance or official document of any kind containing the term *"Bevölkerungspolitik."* However, not using the term does not mean Germany can forget about the issues population policy concerns itself with.

As in any other form of human action, policymaking inevitably involves seeking answers to the following questions:

(1) What should the aims and objectives of policymaking be?

(2) What do policymakers have within their powers to achieve, how much room to maneuver do they have, and what options are available?

(3) How significant are ethical principles for the policymakers, which aims are ethically legitimate, and which can be automatically ruled out; what are policymakers allowed, or forbidden, to do?

How can it be that, even though these issues are also of great importance for population trends in Germany, most of our democratic representatives would deny that there is any such thing as a population policy in the country? Though aspects of family policy, social policy, or other policy fields have irrefutable demographic impacts, primarily on the birth rate or on life expectancy, does it really resolve the dilemma if we refrain from grouping these aspects under a "population policy" heading because the intent of these policies originated in some other area, such as policy toward the family?

Of course it is important to classify policies according to their original intent, but when we assess them it is not just the intention but also the consequences in the real world that count. Were we to focus on intent alone, we might find a policy on families that led to a low birth rate and a steady population shrinkage perfectly satisfactory, even as the number of families it addressed continually declined.

The proposition that Germany does not have any population policy - because policymaking does not pursue any such goals or have any intentions of this kind - becomes

even less plausible when we hold it up to the mirror of migration policy, with all its pronounced demographic consequences. Of course, "migration policy" is not specifically named any more than population policy is in the country's laws and regulations, but migration across Germany's borders, in either direction, is regulated (if not actually managed) in detail by an immense variety of legal documents that carry other headings, whether it be nationality law, the law as it applies to asylum, refugees or foreign citizens, labor law, and so on. The distinction between regulation and management is typical of the situation in Germany, which is the only country in the world to provide a constitutionally guaranteed individual right of asylum. Constitutionally, then, German politicians are not in a position to decide how many asylum applicants may come from a country in which people are persecuted on political grounds: That decision lies with the applicants themselves. So the German state can regulate how it deals with asylum applicants, but cannot manage their numbers. The draft Immigration Law presented by chancellor Schröder's government will not do anything, and indeed has no intention of doing anything, to change this situation.

The rationale behind the Immigration Law is primarily economic. As numbers decline in the population's younger age groups, the idea is that shortfalls in the supply of labor should be forestalled by attracting in immigrants. Germany has already operated this form of compensatory immigration policy since the 1960s, via its arrangements for "guest workers." The Immigration Law has been designed to systematize and intensify these arrangements. At the same time, however, official statements continually stress that population objectives have not played any part in these legislative proposals. On the one hand, the bill's proponents never miss an opportunity to stress the positive impact the new law would have on the age profile of the population, yet on the other they claim not to be deliberately aiming for a demographic impact.

Immigration and emigration do exert strong demographic influences on population structure, whether we choose to recognize them or not. In the democratic system of today, the demographic impacts of political actions (or omissions) cannot be avoided - the best the policymakers can do is to call them something else. But what is the problem about telling it like it is in the field of population policy impacts? Surely the Nazis' right to imbue the term *"Bevölkerungspolitik"* with a particular meaning was buried along with their political system? Germany needs to regain sovereignty over its own vocabulary: without it, it will not create lasting intellectual and political sovereignty. So Germany's modern democrats not only have the right, but the duty to define population

policy in appropriate new terms, instilling it with a meaning geared to democratic objectives.

2   Biographical and societal factors in declining birth rates and population sizes - Consequences for family policy

According to responses received in many different surveys, the decline in birth rates in Germany in recent decades is not necessarily attributable to any appreciable reduction, let alone to the disappearance, of people's wish to have children. Rather, it is economic and societal factors that keep them from making that wish come true. Even so, it is difficult to maintain a clear picture of how exactly we should define the "wish to have children", as survey respondents tend to attach various prerequisites to their wishes, such as the availability of child care facilities, adequate state financial support, the prior attainment of certain occupational qualifications or career objectives, and so on. Despite decades of research, it is not easy to say whether the wish for children has grown less intense on average or the obstacles to realizing that wish have simply grown larger, or rather, what the proportionate relationship between the two factors is.

However, that is not to say that our knowledge is insufficient to analyze demographic developments to date and, on that basis, to forecast probable future developments. Summarizing research findings on the reasons for the declining birth rate, three factors crystallize on each of two levels - the individual and society - and these offer nine different combinations typifying particular causes.

On an individual level, the concept of a person's biographical universe provides the basis for describing and analyzing these causes. The concept stands for the number of alternative biographies in which there is a certain probability of having a child - a key biographical event. The probability of having a child depends on both the size and the nature of the individual's biographical universe. These in turn are determined by the three prime factors of upbringing and education, occupational career, and influences related to the person's living and working location (Figure 1).

There are three more prime factors on the societal level which determine the biographical universe: The first is the social welfare system, which is crucial to the degree of dependence on one's own children in protecting against elementary life hazards associated

with old age, sickness or frailty. The second significant issue is the extent to which society provides the conditions in which it is possible for parents (especially mothers) to go to work and still have time for their family. A third important issue is whether there is an awareness within society of the link between personal decisions to have or not to have a family and the make-up of the population itself. Just as we speak of environmental awareness, we might also speak of demographic or population awareness.

Figure 1: **The demographic-economic paradox – Intervening factors affecting the relationship between the number of children per woman and the economic/biographical opportunity costs of children**

		Societal constraints on the biographical universe		
		Social welfare system	Compatibility of working and family life	Mental association between demographic reproduction and individual procreation
Biographical universe of the individual	Education	*Demographic-economic paradox:*		
	Occupation	**The higher per capita incomes of women, the higher the economic and biographical opportunity costs of children, and the lower the number of children per woman.**		
	Location (urban/rural environment)			
Additional variables affecting the total and the completed fertility rates of a country:				
- level of immigration from high-fertility countries				
- ethnic composition of the population				
- settlement structure (degree of urbanization)				
- timing effects on parity-specific birth rates				
- proportion of childless women				

The size and nature of individuals' biographical universes will crucially influence the alternative actions available to and options perceived by them. Empirical research into individual biographies has shown that the probability of an individual making the long-term commitment involved in having a child will be lower in proportion to the number of biographical options the person will close out of the biographical universe by making that commitment (*Birg*, 1991b; *Birg*, 1991a; *Birg/Flöthmann/Reiter*, 1990, pp. 145-182). These closed-out options represent the "biographical opportunity cost" of having children. The economic opportunity cost of having children forms part of the overall biographical opportunity cost, and is measurable as the income foregone by a parent (usually the mother) who ceases to work in order to bring up the child or children when

conditions in society are such as to make continuing with paid work insufficiently compatible with the extra work that now needs to be done at home. The phenomenon of the "demographic-economic paradox" identified by the biographic theory of fertility consists in a fall in the number of children per woman in line with increasing per capita income. In Germany, for example, the total fertility rate is now only half as high as it was in the 1960s (1.3-1.4 children per woman, against 2.6 in the '60s); over the same period, per capita income has more than doubled.

In modern societies, the most momentous long-term commitments arising in individual biographies tend to be the choice of training and subsequent career. These decisions occur early on in a person's biography, and are often made at about the same time as his or her attachment to a life partner. These commitments tend to create a relatively early polarization between biographies that do and those that don't include having children. For those who do have them, the opportunity cost of first becoming a parent is considerably higher than that of having the second or the third child.

These theoretical propositions are empirically supported by statistics on births and demographic/biographical analyses based on those figures. In Germany, for example, women from the cohort born in 1955 who already had three children were found to be *more likely* to have a fourth child when aged 32 or over than those without children were to have a first child at the same age. The probability was also higher than it was for women with two children to have their third, or for those with one child to have their second (Appendix, Figures 2 and 3). This empirical finding is exactly what the biographic theory of fertility would lead us to expect, as it predicts that the options eliminated from the biographical universe (i.e., the biographical opportunity costs) will decrease with each additional child.

This finding would also lead us to expect government policy toward the family to influence parents with two or three children more strongly to have one more than it would those couples who do not yet have children, or who have an only child. This too is confirmed by the empirical data: Figures 2 and 3 chart the probabilities of one more child being added to the family, for mothers of different ages. Changes to the German federal government's financial support for families enacted in 1986 (introduction of a "child-raising allowance" and credits toward a woman's statutory pension contributions to compensate for time out of work on parental leave) generated a pronounced jump in the probability of a third or fourth child being born to women with 1955 or 1960 as their

date of birth (then aged 31 or 26), whereas the increase is less easily discernible for a second child, and not recognizable at all for a first. The overall impact on birth probabilities of the family-policy measures taken in 1986 was so small that - taking women born in 1955 as an example - it only raised the number of children per woman from 1.61 to 1.63, i.e. by about one percent (for details of the computation see *Birg* (2003), p. 80).

The crucial factor determining the total fertility rate is the proportion of women in each age cohort who remain childless for life. Between the cohorts born in 1940 and 1965, that proportion increased from 10.6% to 32.1%. By contrast, among those that did have children the number of children per woman remained relatively constant at around two. Thus the decline in the birth rate for women born after 1940 has primarily been due to a steady increase, cohort by cohort, in the number who remain childless for life.

These findings from demographic research suggest two policy options for increasing the birth rate. The first of these options would address the roughly one-third of all women of the birth cohorts born 1960 and after who would normally remain childless. The aim should be to substantially lower the incidence of lifelong childlessness in this crucial target group. The second policy option would address the two-thirds of women who do have children, aiming to raise the average number above two per woman.

The first of the two strategies will have the greater impact, but it calls for a set of family-policy instruments carefully tailored to its childless target group. A crucial component in this will be to convey a set of values which can take up an opinion-leading function in society, convincing the public that it means a lot to have children. Unless these policy changes are made, to set about transforming society's values on this issue, it is fair to assume that an ever greater proportion of young people will fail even to give serious consideration to the biographical option of raising a family.

3   Internal regeneration through births or replacement through migration? Demographic simulations for the EU countries, Japan and the United States

There are two fundamentally different strategies available for preserving the demographic basis of a society: Either the population can continuously replenish itself as new-born generations take the place of those dying out, or the latter can be replaced

by immigrants from other societies. For centuries, the former alternative was regarded as the normal, self-evident strategy. However, in the final quarter of the 20th century the birth rate in most industrial countries fell below the replacement level of 2.13 live-born children per woman, meaning the population cannot be maintained at its existing level by internal regeneration alone. In a number of industrial countries, it has thus become a standard approach to compensate for the shortfall in births by net inward migration, which has been pursued as a policymaking strategy.

The transition from a policy of internal regeneration to one of replacement by net immigration was not heralded by a public debate in any of the countries involved, nor initiated by democratic decisions - rather, the change was ushered in silently, and more or less without any prior consideration. In this general atmosphere of stealth, the United Nations Population Division made a welcome exception when it published its research report on *Replacement Migration* in March 2000 (United Nations, 2000).

The title of the research report was programmatic, with the concept of *"replacement migration"* taking its place alongside, or possibly even as a substitute for, the previously familiar term of *"replacement fertility"*. The terminological symmetry is by all means appropriate to the substantial symmetry between these concepts, for in principle they are regarded as covalent means of achieving one and the same aim - the preservation of society's demographic basis. Admittedly, the research report tags on a question after naming the strategy ("Is it a solution to declining and ageing populations?"), but at times the report reads as if the question is no more than rhetorical.

The report answers five questions, for eight individual countries, Europe as a whole and the EU:

(1) Based on mid-range assumptions as to fertility, mortality and migration, how would the population be expected to develop in the period up to 2050?

(2) How would it develop if the mid-range fertility and mortality assumptions are retained, but zero migration is assumed?

(3) How much migration is required to maintain a constant population?

(4) How much migration is required to maintain a constant potential workforce (defined as the 15-64 age group)?

(5) How much migration is required to maintain a constant ratio between those of retirement age (65 and over) and those of working age (15-64)?

In Germany's case, it was the answer to the fifth question in particular that caused a stir: The country would need to attract net inward migration of 188 million people by the year 2050 simply to uphold a constant ageing index. But that would also entail the growth of the population from 82 to 299 million (Table 1).

Table 1: **Net number of migrants, 1995-2050, by scenario and country or region (Thousands)**

Scenario	I	II	III	IV	V
Country or region	Medium variant	Medium variant with zero migration	Constant total population	Constant 15-64 age group	Constant ratio 15-64/65 years or older
A. Total number					
France	525	0	1 473	5 459	93 794
Germany	11 400	0	17 838	25 209	188 497
Italy	660	0	12 944	19 610	119 684
Japan	0	0	17 141	33 487	553 495
Russian Federation	7 417	0	27 952	35 756	257 110
United Kingdom	1 200	0	2 634	6 247	59 775
United States	41 800	0	6 384	17 967	592 757
Europe	23 530	0	100 137	161 346	1 386 151
European Union	16 361	0	47 456	79 605	700 506
B. Average annual number					
France	10	0	27	99	1 705
Germany	207	0	324	458	3 427
Italy	12	0	235	357	2 176
Japan	0	0	312	609	10 064
Russian Federation	135	0	508	650	4 675
United Kingdom	22	0	48	114	1 087
United States	760	0	116	327	10 777
Europe	428	0	1 821	2 934	25 203
European Union	297	0	863	1 447	12 736

Source: United Nations (2000), p. 24.

Some of the report's answers to the catalog of five questions are quite spectacular. This has tended to create a false impression among the general public that the answers are

what makes the report so novel, whereas in fact it was in the questions asked that it broke new ground. "Replacement migration" is now referred to alongside "replacement fertility" just as if the terms had always been used in tandem for the same objective, and indeed really belonged together. Thus they have come to be perceived as a form of double concept which has altered the way people in the industrial countries think about the demographic future. It is as if the introduction of the term "replacement migration" had somehow broadened the policymakers' options and offered them new perspectives.

Yet to read the report in this way is to misread it seriously. In fact, the study offers further proof that a move away from the natural strategy of internal regeneration by births to one of replacement by immigration will not prevent the key demographic problem of population ageing, and the best it can do is to slightly cushion the impact.[2] Looking at Germany, for example, the ageing index (65+/15-64) is projected to increase from 22.7 in 1995 to 57.1 in 2050 in the absence of any net migration. If, instead, net inward migration of approximately 200,000 young people per annum is assumed, the ageing index in 2050 does not turn out markedly lower, and is still 48.8. Taking the European Union as a whole, and assuming a proportionately lower net immigration figure of 297,000 per annum, the difference as one would expect is even less pronounced (51.0 versus 52.9), and the situation is similar for the United States assuming annual net immigration of 760,000 (35.0 versus 38.9). So the figures can be summed up as follows: To prevent demographic ageing - which is due primarily to a low birth rate and only secondarily to increasing life expectancy – the number of younger people who would have to immigrate is so great that this would create more problems than it would resolve.

4   Demographic projections for the member states of the European Union

The projections I should now like to present for the 15 member states of the European Union were computed at the Institute of Population Research and Social Policy (IBS) at the University of Bielefeld, and cover the 1998-2100 period. The presentation will focus mainly on the projection variants assuming zero net migration. The variant taking net migration into account was computed by Thomas Frein, one of my students at the Institute, for his thesis which is so far unpublished, though the findings have been documented in detail and are available to specialists who are interested. However, the pro-

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2   Studies on this problem as it affects Germany have been available for some time, e.g. *Birg/Flöthmann/Frein/Ströker* (1998).

jections with migration presented in this paper for the EU are those published by the UN Population Division (United Nations, 2000).

In 1998, the total fertility rate averaged 1.47 live-born children per woman in the 15 EU countries. The average for the northern member states (Ireland, United Kingdom, Finland, Sweden and Denmark) was 1.70, for the central countries (Germany, Netherlands, Belgium, Luxembourg and Austria) it was 1.41, and in southern Europe (France, Italy, Spain, Portugal and Greece) 1.39. Country-by-country detail is provided in Table 2.

Table 2: **Level of fertility and ageing index in the countries of the European Union 1998 and 2050 (excluding migration)**

	Live-born children per woman (TFR)	Ageing Index (1)		Ageing Index (2)	
	1998	1998	2050	1998	2050
Northern Europe	1.70	37.2	69.4	23.7	44.5
United Kingdom	1.72	37.6	69.3	23.9	44.4
Denmark	1.72	34.7	65.0	22.2	42.7
Sweden	1.50	41.2	78.7	27.1	49.7
Finland	1.70	35.2	68.8	22.0	44.5
Ireland	1.93	28.3	61.3	17.0	39.4
Central Europe	1.41	38.3	86.3	23.0	55.9
Germany	1.36	39.8	90.7	23.3	58.5
Austria	1.34	34.8	90.6	22.9	59.8
Belgium	1.55	40.0	77.2	25.3	50.3
Netherlands	1.63	31.3	72.8	19.9	47.6
Luxembourg	1.68	33.7	68.7	21.3	44.8
Southern Europe	1.39	39.4	87.8	24.7	58.8
France	1.75	37.9	69.7	24.1	45.1
Italy	1.18	41.6	103.8	26.1	70.3
Spain	1.18	38.2	105.6	24.1	72.6
Portugal	1.46	36.9	80.2	22.4	54.4
Greece	1.29	41.7	98.4	25.0	66.5
EU total	1.47	38.6	82.8	24.0	54.4

Ageing Index 1: (P (60+) / P (20-60)) 100; Ageing Index 2: (P (65+) / P (15-65)) 100
Source: *Birg* (2000).

The assumptions underlying the projections are as follows: (1) The total fertility rate will remain at its 1998 level or increase slightly. The average for all 15 EU members is assumed to increase from 1.47 in 1998 to 1.51 in 2050. (2) Life expectancy at birth, which differs slightly from country to country, will increase on an EU-wide average from 74.53 years in 1998 to 80.00 in 2080 for males and from 80.79 to 86.25 over the same period for females. (3) The assumptions on net migration are based on differentiated analyses of migration flows among the 15 member states, and also

between each member state and non-EU countries. However, I shall not go into any more detail on these assumptions at this point, as the scenarios presented in this paper which include migration are the results provided by the UN Population Division's more straightforward forecasting model (United Nations, 2000).

The projections computed are neither forecasts nor prophesies: They are conditional ("if A, then B") statements about the future. In other words, if the assumptions are exactly or almost exactly fulfilled, the projections will be a very close approximation of what actually happens. The results of the projections can be summarized in six observations:

(1) The population of the EU-15, excluding all migration effects, is projected to decrease from 375 million in 1998 to 296 million in 2050, and further to 184 million in 2100. The percentage population decline turns out above the EU average in Italy, Spain and Germany, while it is below the average in France and Britain. Thanks both to a higher birth rate and a more favorable age profile, the French and British populations will continue to grow slightly until 2015 even without any net immigration, and the Irish one is projected to maintain some growth until 2050, before it turns into decline, too (Table 2 and Appendix, Figure 4).

(2) The population shrinkage is due to a fall in the number of younger people accompanying a simultaneous increase in the number of older people. Thus the EU's population "pyramid" has changed to the extent that it will assume the shape of a mushroom in which the 70–80-year-olds make up the largest age group (Appendix, Figure 5).

(3) Demographic ageing is an automatic consequence of population shrinkage, measurable by an ageing index and changes in that index. There are two normal definitions of the ageing index in demographic literature: *Ageing Index 1* = The number of people aged over 60 as a percentage of those aged 20-60; *Ageing Index 2* = The number of people aged 65 and over as a percentage of those aged 15 and under 65. The two indices are equally well suited to the task of describing demographic ageing, and correlate closely with one another (Appendix, Figure 6). In 1998 the mean Ageing Index 1 for the 15 EU countries was 38.57, and it is projected to grow to 82.75 in 2050. The corresponding figures for Ageing Index 2 are 23.96 and 54.24, respectively.

(4) A comparative analysis of the 15 individual EU member states shows an inverse relationship between the birth rate and the intensity of demographic ageing: The higher the number of live-born children per woman, the lower the ageing index in the future. The EU's lowest birth rates and highest future ageing indices are in Spain, Italy and Greece. The highest birth rates and lowest future ageing indices are in Ireland, Denmark, France, the United Kingdom and Finland (Appendix, Figure 7).

(5) Immigration of younger people into the EU would only slightly alleviate the growing age index. In the United States, too, the influence of immigration on demographic ageing would be relatively small. According to the UN Population Division's projections, the EU's Ageing Index 2 will increase from 23.2 in 1998 to 52.9 in 2050 without any net migration, or to 51.0 if net immigration is included. In Germany, the increase without migration would be from 22.7 to 57.1, and with net immigration to 48.8. In the United States, the rise without migration is estimated to be from 19.2 to 38.9, and with net immigration to 35.0 (Appendix, Figure 8).

(6) The 15-65 age group which is so important for the size of the workforce will continue to increase slightly in the countries with above-average birth rates until 2005-10, even without any net immigration, while in Ireland it will continue to grow quite strongly and will not peak until 2040-45. The EU countries where this age group is still growing are Ireland, France, United Kingdom, Netherlands, Denmark and Finland. In the other countries, and on an average for the whole EU, it has already shrunk a little since 1998 (Appendix, Figure 9). Zooming in from the broad potential-workforce age group to a younger subgroup within it, those aged 20-40 have been declining in number in all EU countries except Ireland since 1998. This age group is set to shrink especially drastically in Italy and Spain (- 47% by 2050), but also in Greece, Germany and Austria (- 40% by 2050) (Appendix, Figure 10).

Conclusions: Total fertility rates in the EU member states were scattered in a relatively broad range in 1998, from about 1.2 live births per woman in Spain and Italy up to 1.7 in Ireland, Britain and France. The lower the birth rate, the more drastic the process of demographic ageing will be in the decades ahead, accompanied by greater population shrinkage and depletion of the workforce.

Thanks to their above-average birth rates and relatively young age profiles, France and the UK will continue to see population growth until 2015, and Ireland until 2050, even without any net immigration, while the population of the remaining EU countries has already been in decline since 1998 without migration effects. The data and analyses show that an increase in the birth rate is the most effective way of halting population decline in the long run and counteracting demographic ageing. To prevent demographic ageing in the EU by taking in young people as immigrants, a total net immigration of 700.5 million people would be needed by 2050, pushing up the EU's population from 375 million in 1998 to 1.2 billion in 2050.

These outcomes show that it would be absurd for demographically oriented policy-making to rely on immigration to make up for a shortfall in births instead of endeavoring to increase the birth rate, which is the path Germany has chosen to follow with its draft Immigration Law.

5   Strategic Options in Family and Migration Policy: The German Case

The report that follows is based on simulations carried out for Germany, looking separately at the former territories of East and West Germany. The scenarios simulated include three separate fertility assumptions (TFR = 1.4, 1.6 or 2.1 live-born children per woman); there are also a low, medium and high variant for the assumed life expectancy, and finally there are four variants in the assumed annual net immigration (zero, 150, 225 and 300 thousand). In total then, the matrix of assumptions yields 36 different simulation variants (*Birg/Flöthmann/Frein/Ströker*, 1998).

For systematic reasons, the results are presented to show *overall population trends* first, although the trend in demographic ageing and in the size of the 20-60 age group representing the core of the workforce is actually more important from the social and economic point of view. If the total fertility rate remains unchanged and there is an increase of 6 years in the average life expectancy, without any migration effects this will lead to a shrinkage in Germany's total population from 82.0 million in 1995 to 58.7 million in 2050 and 30.3 million in 2100. If the number of children per woman increases slightly to 1.6 by 2010, that produces a population of 63.9 instead of 58.7 million in 2050, and 40.6 instead of 30.3 million in 2100. If the fertility rate rose further and longer, to 2.1 by 2030, the population in 2050 would be 71.2 million and in 2100 it would be 67.1 mil-

lion. In this latter scenario, deaths would continue to outnumber births up to the year 2080 because the declining number of births from 1972 onward would still "knock on" to provide smaller generations of parents, thus having decreasing numbers of children to be the next potential parents, and so on (Appendix, Figures 11-13).

If the increase in total fertility to 1.6 children per woman is combined with annual net immigration of 150,000 young people, a split pattern emerges: The population grows to 82.5 million by 2010, but subsequently falls to 73.6 million in 2050 and 59.0 million in 2100. If a higher net immigration of 225,000 people annually is assumed, the population continues growing until 2020, when it reaches 83.8 million, and then falls to 78.6 million in 2050 and 68.4 million in 2100. The pattern obtained with 300,000 net immigrants per annum is growth continuing to the 85.8-million mark in 2025, then 83.6 million in 2050 and 77.8 million in 2100.

Conclusions: An increase in the number of children per woman from 1.4 to 1.6 combined with annual net immigration of, for example, 150-225,000 turns the population shrinkage that would otherwise be expected into slight growth until 2010-2020. If net immigration were boosted to 300,000 people each year, growth would continue until 2025, then shrinkage would set in.

The two-phase pattern before and after 2020 (or thereabouts) is especially important when it comes to analyzing the *20-60 age group* which is the key determinant of the size of the workforce. If the total fertility rate is 1.4 live-born children per woman and net immigration is 150,000 per annum, the number of people in this key age group initially declines relatively moderately in the pre-2020 phase, by 3.4 million (7.5%). However, in the second phase (2020-50) the trend accelerates rapidly, leading to a further loss of 11.3 million people (26.8%). When the two phases are combined, the net loss to the 20-60 age group between 2000 and 2050 is 14.7 million people (32.3%). Simultaneously, the over-60 age group increases by 9-10 million, causing the ageing index to increase by a multiple between two and three.

If the birth rate increases from 1.4 to, say, 1.6 live-born children per woman, this will hardly influence the decline in the potential workforce during the early phase from 2000-2020, but it will substantially alleviate it in the later, 2020-50 phase. As the workforce decline in the earlier phase is in any case relatively gentle, and can largely be counteracted by labor-market policies to reduce unemployment, the main point to ad-

dress is the need to cushion the much sharper fall in this age group during the second phase by increasing the birth rate as early as possible. How much impact this would have is illustrated by these figures: At a constant birth rate of 1.4 children per woman, the number of people in the 20-60 age group is set to fall by 11.3 million (26.8%) in the 2020-50 period, whereas an increase in the total fertility rate to 1.6 would cut back that fall to 8.7 million (20.7%) both cases assume the same annual net immigration of 150,000 people (Appendix, Figures 14-16).

Conclusions: Successful policies toward families which raise the birth rate will follow through some 20 years later as a success in increasing the size of the potential workforce. An increase in the total fertility rate from 1.4 to 1.6 live-born children per woman would alleviate the fall in the number of people potentially available to work during the 2020-50 period by 2.6 million.

A stronger emphasis on family policy to raise the birth rate and thus boost the future supply of labor is a strategic policy option with a number of decisive advantages over the strategy practiced to date, of making up demographic shortfalls by taking in more immigrants. The first such advantage is that it reduces the costs of integration. As research papers commissioned by the Federal Ministry of Labor and Social Affairs and prepared by the Ifo Institute and the Max Planck Institute for Foreign and International Social Law have shown, the public money paid out to immigrants via the social insurance system (statutory health insurance, pensions and long-term care allowances) together with other transfer payments funded by the tax system, and the payments made by local authorities and state governments to provide public goods (schools, hospitals, transport infrastructure, public administration, etc.) were actually found to outweigh the revenue the state collects from immigrants by a four-figure sum of deutschmarks per capita per annum (Table 3). These findings contradict the commonly held notion that Germany's public purse benefits from immigration. In fact, the report found that immigration into Germany has long been, and continues to be, a form of "immigration into the welfare state", causing a "redistribution of resources from German nationals to the immigrants," as the report itself states (*Sinn* et al., 2001, pp. 225-227).

The second key advantage of the strategy geared to encouraging larger families relative to one of compensating for shortfalls via immigration is that it boosts per capita incomes. Satisfactory growth in productivity and per capita income requires a highly trained, well educated workforce. The average educational or training level of immi-

grants into Germany is substantially lower than the average level for German nationals. Of the foreign nationals leaving school in Germany in 1999, 40.9% had only the lowest level of leaving certificate (*Hauptschulabschluss*) compared with 24.7% among German nationals, while 19.4% (German nationals: 8.0%) left school without any leaving certificate at all (*Jeschek*, 2001, table 1, p. 163 and table 3, p. 166).

Lack of qualifications is a key reason why the rate of unemployment and the proportion of income support recipients are higher by a factor of three or more among non-EU immigrants; this applies not only in Germany but also in almost all other EU countries (Appendix, Figure 17). Moreover, the shortfalls in training and educational levels are all the larger, the greater the proportion of immigrants in the overall population (Appendix, Figure 18). It is unrealistic to expect that these qualification differentials could be narrowed to the desired extent in the future.

The strategy of filling population gaps by higher immigration would impair the overall educational and training standards that form a key component in the human capital offered by younger employees that is vital to productivity levels. By its nature, the immigration strategy generally increases the size of the workforce and thus also generates a higher gross national product (GNP) than the alternative course of keeping immigration levels lower while devoting more resources to encouraging larger families. However, the all-important *per capita* income level is likely to be higher if a society has a moderate rather than a high level of immigration, as shown in the following example:[3]

High immigration strategy:	
GNP growth rate	= 2.5%
Population growth rate	= 0.7%
Growth in per capita income (2.5 – 0.7 = 1.8)	= 1.8%
Moderate immigration strategy:	
GNP growth rate	= 1.7%
Population growth rate	= - 0.7%
Growth in per capita income (1.7 – (–0.7) = 2.4)	= 2.4%

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3   Mathematically speaking, the growth in per capita income equals the difference between the growth rates in gross national product and the population.

In the public debate on immigration in Germany, proponents invariably emphasize the positive impact of immigration on the gross national product. But in fact, the focus should be on *per capita* GNP. Switzerland does not act as a magnet for immigrants from, say, developing countries in Asia because it has a higher GNP than Asia which it patently does not, but because the country's GNP per head of the population is so much higher, and hence the standard of living.

Table 3:   The Fiscal Impact of Immigration

Direct fiscal impact per immigrant[1] - Western Germany, 1997:				
	Immigrants[2]			
	Length of stay (years)			Total
	0-10	10-25	25+	
	Sums of money in DM[5]			
Government receipts				
Statutory health insurance	1,817	2,237	3,792	2,773
Statutory pension insurance	4,053	4,731	6,330	5,290
Statutory long-term care insurance	252	311	470	368
Unemployment insurance	701	1,091	1,393	1,157
Tax revenues	6,044	6,046	9,687	7,576
Total receipts	12,866	14,415	21,672	17,164
Government expenditure				
Statutory health insurance	2,970	2,321	3,696	3,018
Implicit pension obligations[3]	1,362	1,590	2,128	1,778
Implicit long-term care obligations[3]	67	83	126	98
Expenditure on unemployment benefits	452	667	2,408	1,353
Tax-funded transfer payments and facilities[4]	12,646	12,358	11,644	12,337
Total expenditure	17,498	17,019	20,001	18,584
Net outcomes				
Statutory health insurance	−1,154	−84	96	−245
Statutory pension insurance	2,691	3,141	4,202	3,512
Statutory long-term care insurance	185	228	344	269
Unemployment insurance	249	424	−1,015	−196
Tax-funded transfer payments and facilities	−6,602	−6,312	−1,957	−4,760
Overall net outcome	−4,631	−2,603	1,670	−1,419

1   The figures in this table are no more than a "snapshot" of the relative position of the immigrants resident in western Germany in 1997. They cannot be directly applied to the anticipated immigrants from Eastern European countries, as future cohorts of immigrants are quite likely to have a different profile.
2   "Immigrants" are defined as non-German nationals, naturalized Germans, and persons with a non-German mother resident in the country, but the figure does not include repatriated German nationals.
3   The implicit taxation concept has been used to calculate these estimated future obligations.
4   Payments made to households by state and local authorities, and averaged costs of providing facilities to the public.
5   For information: 1 DM = 0.51129 €
Source: *Sinn* et al. (2001), p. 227.

6   Summary

During the last 50 years, birth rates in the industrial countries have roughly halved. In Germany, this decline has primarily been due to an increase in the proportion of women remaining childless for life, who now make up roughly one third of the cohorts born 1960 and later, while those who do have children continue to have an average of about two. Thus European Union countries where the proportion of childless women is relatively low (such as France) tend to have birth rates above the EU average, while those with a higher proportion of childless women (like Germany) have below-average rates.

The high level of childlessness in Germany means that society is split between those with and those without their own families. This has serious consequences for the constitutionally enshrined principle of social equity, for if this is breached the social welfare systems can no longer do their jobs properly.

Since World War II, Germany has not had any explicit population policy, with one key exception: Germany's approach toward immigration represents a surrogate population policy in which an ever-increasing proportion of the natural population wastage from deaths, rather than being renewed by a similar number of births, is instead replaced by immigration.

Replacement by immigration is a less favorable course to take than the alternative strategy of natural replenishment via a higher birth rate, whether from an economic or from a social policy standpoint. This is because a high immigration rate tends to lower the population's overall educational level, and to act as a damper on growth in per capita income while pushing up integration costs.

The replacement strategy also raises problems in an international context. The danger is that whatever economic benefits accrue to a country taking in immigrants will be benefits forfeited by their countries of origin. The crux is that immigrants first have to be born, raised and educated somewhere before they can move to another country that is eager to take the best and the smartest. There can be no moral justification whatsoever for a strategy in which rich countries persistently make up their own demographic deficiencies at poorer countries' expense, thus establishing a form of demographic colonialism by means of immigration policy.

References

Birg, H. (1991a):
  A Biographic/Demographic Analysis of the Relationship between Fertility and Occupational Activity for Women and Married Couples, in: Siegers, J.J.; Jong-Gierveld, J. de; Imhoff, E. van (Eds.), Female Labour Market Behaviour and Fertility - A Rational-Choice-Approach, Berlin/Heidelberg.

Birg, H. (1991b):
  Differentielle Reproduktion aus der Sicht der biographischen Theorie der Fertilität, in: Voland, E. (Ed.): Fortpflanzung: Natur und Kultur im Wechselspiel, Frankfurt.

Birg, H. (2000):
  Demographic Ageing and Population Decline in 21st Century Germany - Consequences for the Systems of Social Insurance, United Nations Population Division (Ed.), http://www.un.org/esa/population/publications/popdecline/pop-decline.htm , October.

Birg, H. (2002):
  Auswirkungen und Kosten der Zuwanderung nach Deutschland. Gutachten im Auftrag des Bayerischen Staatsministeriums des Innern. Materialien des Instituts für Bevölkerungsforschung und Sozialpolitik, Bd. 49, Universität Bielefeld, Bielefeld.

Birg, H. (2003):
  Die demographische Zeitenwende - Der Bevölkerungsrückgang in Deutschland und Europa, München.

Birg, H.; Flöthmann, H.-J. (2001):
  Demographische Projektionsrechnungen für die Rentenreform 2000 - Methodischer Ansatz und Hauptergebnisse. Materialien des Instituts für Bevölkerungsforschung und Sozialpolitik, Bd. 47A u. 47B, Universität Bielefeld, Bielefeld.

Birg, H.; Flöthmann, E.-J.; Reiter, I. (1990):
  Biographic Analysis of the Demographic Characteristics of the Life Histories of Men and Women in Regional Labour-Market Cohorts as Clusters of Birth Cohorts, in: Becker, H.A. (Ed.): Life Histories and Generations, Utrecht, pp. 145-182.

Birg, H.; Flöthmann, E.-J.; Frein, T.; Ströker, K. (1998):
  Simulationsrechnungen zur Bevölkerungsentwicklung in den alten und neuen Bundesländern im 21. Jahrhundert. Materialien des Instituts für Bevölkerungsforschung und Sozialpolitik, vol. 45, University of Bielefeld, Bielefeld.

Bundesministerium des Innern (2001):
  BMI/Unabhängige Kommission für Zuwanderung (Eds.): Zuwanderung gestalten - Integration fördern, Berlin, 4. Juli.

Coleman, D. (2001):
  Migration nach Europa. Eine Kritik am neuen Konsens des Establishments, in: Zeitschrift für Bevölkerungswissenschaft, No. 26, pp. 327-340.

Deutscher Bundestag (Ed.) (2002):
  Schlußbericht der Enquete-Kommission des Deutschen Bundestages „Demographischer Wandel", Bundestagsdrucksache 14/8800, 28.3., Berlin.

Deutsches Institut für Wirtschaftsforschung (2001):
Schulbesuch und Ausbildung von jungen Ausländern, Wochenbericht, Nr. 10.

Jeschek, W. (2001):
Schulbesuch und Ausbildung von jungen Ausländern, in: DIW-Wochenbericht, Nr. 10.

Leipert, C. (Ed.) (2003):
Demographie und Wohlstand: Neuer Stellenwert für Familie in Wirtschaft und Gesellschaft, Opladen.

Sinn, H.-W. et al. (2001):
EU-Erweiterung und Arbeitskräftemigration - Wege zu einer schrittweisen Annäherung der Arbeitsmärkte. Ifo-Beiträge zur Wirtschaftsforschung, Nr. 2, München.

Suntum, U. van; Schlotböller, D. (2002):
Arbeitsmarktintegration von Zuwanderern, Gütersloh.

Statistisches Bundesamt (2002):
Bevölkerungsentwicklung Deutschlands bis zum Jahr 2050 - Ergebnisse der 9. koordinierten Bevölkerungsvorausberechnung, Wiesbaden.

United Nations (2000):
Replacement migration: Is it a solution to declining and ageing populations? Population Division, Dept. of Economic and Social Affairs, United Nations Secretariat, New York.

United Nations (2001):
World Population Prospects – The 2000 Revision, New York.

Appendix

Figure 2: Probability of the birth of a first, second, third or fourth child by a woman born in 1955
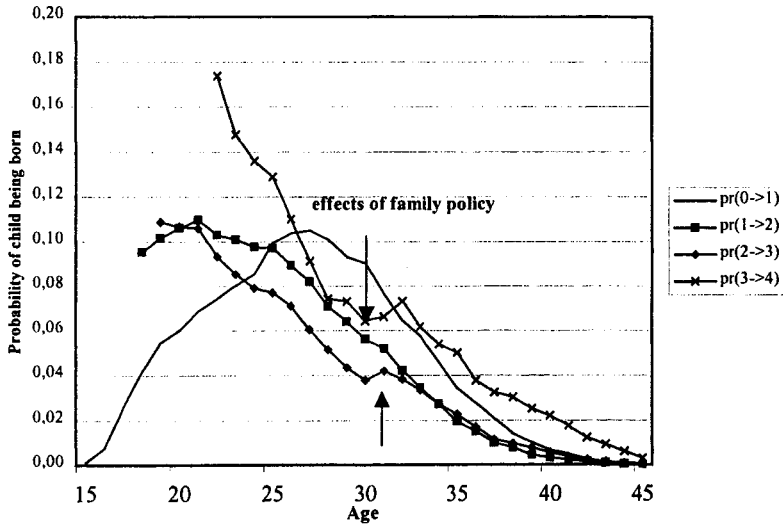
Figure 3: Probability of the birth of a first, second, third or fourth child by a woman born in 1960

Source: Own calculations.

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Figure 4: 21st-century population changes in the current EU (15), Turkey and the countries on the southern Mediterranean seaboard

Figure 5: Age profile of the population in the EU 15: 2000, 2025, 2050, 2075 and 2100
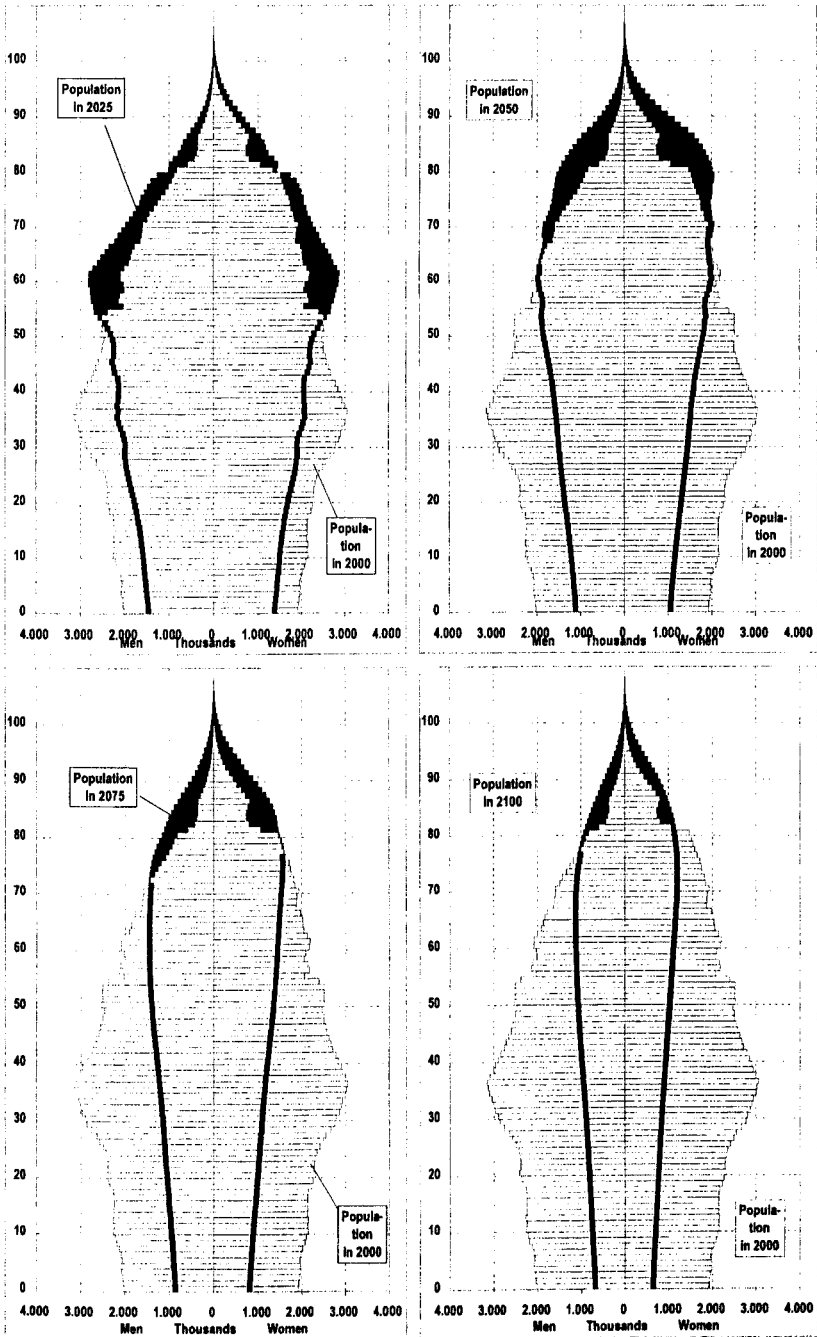
Source: Own calculations.

Figure 6: Two definitions of the demographic ageing index and their correlation in the countries of the European Union 1998
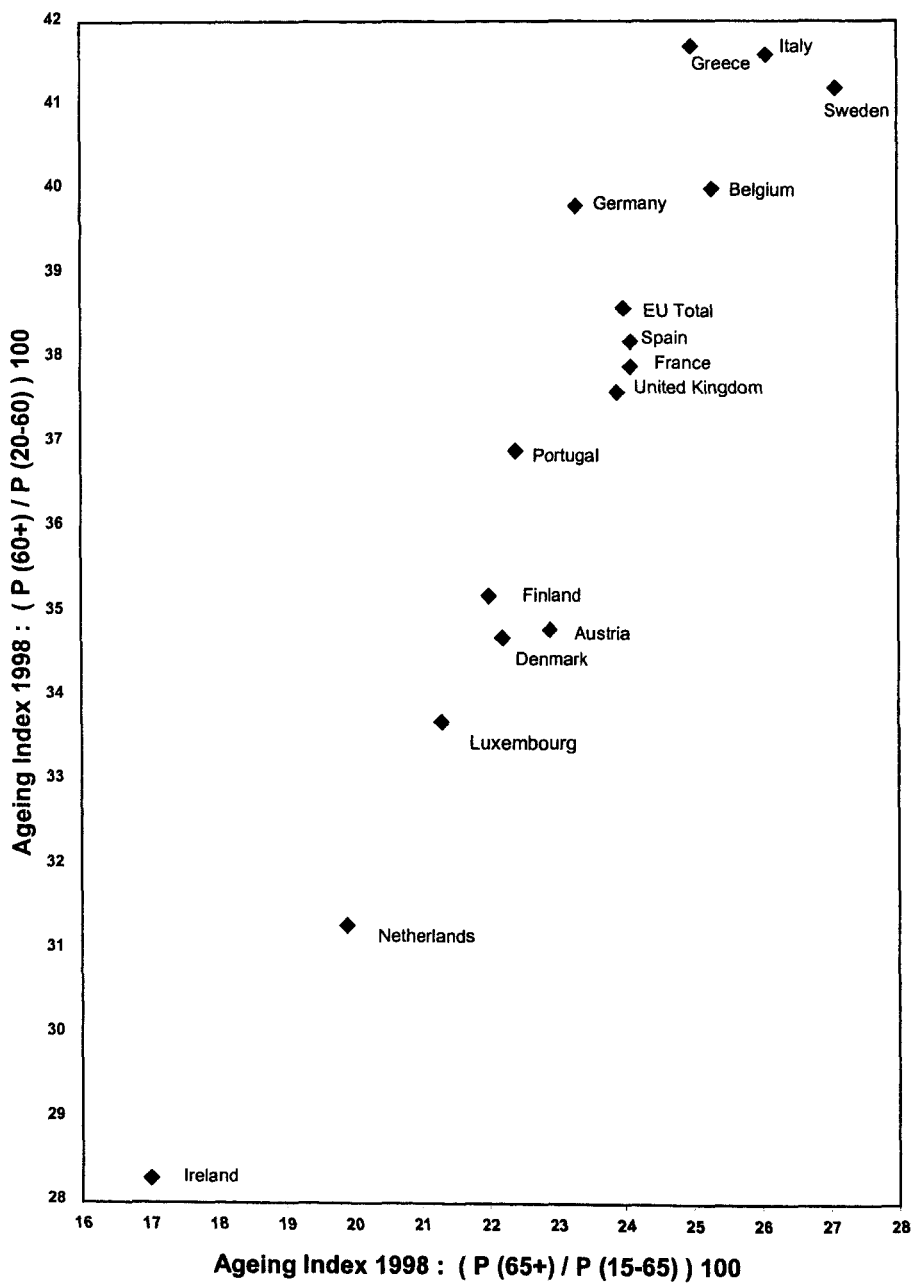
Source : H. Birg, IBS, University of Bielefeld

Figure 7: The impact of the level of fertility on demographic ageing - projections for the countries of the European Union (excluding migration)
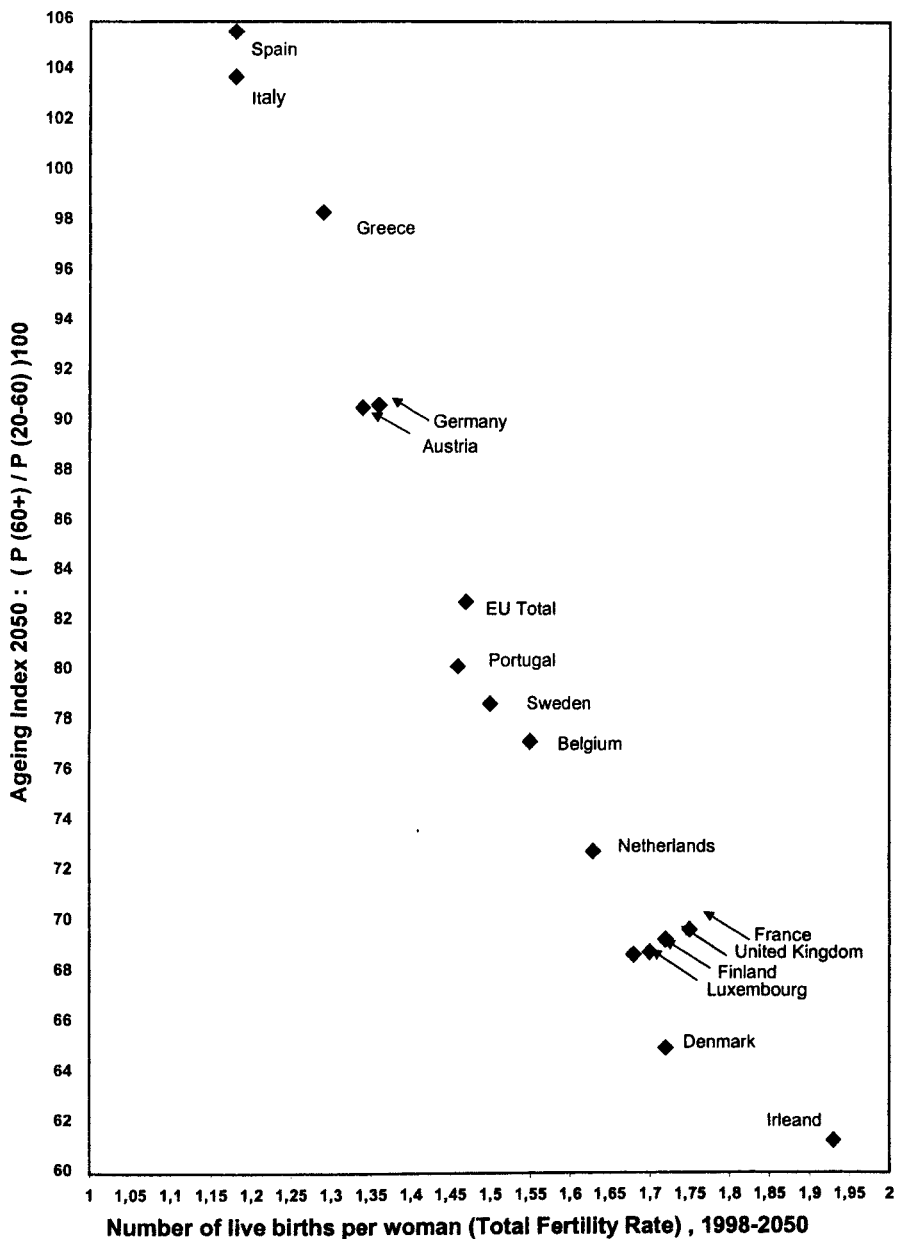
Source : H. Birg, IBS, University of Bielefeld

Figure 8: Projections of the ageing index in industrialized countries 1995-2050[1]

Italy

Japan

Germany (ex-
cluding migration)

EU (excluding migr.)

EU (including migr.)

Germany (in-
cluding migration)

France

UK

USA (excluding
migration)

USA (including
migration)

Italy (TFR: 1,20->1,66)
Japan (TFR: 1,43->1,75)
Germany (TFR: 1,30->1,64)
EU (TFR: 1,44->1,80)
France (TFR: 1,71->1,96)
UK (TFR: 1,72->1,90)
USA (TFR: 1,99-> 1,90)

Ageing index

70
60
50
40
30
20
10
0

1995   2005   2015   2025   2035   2045
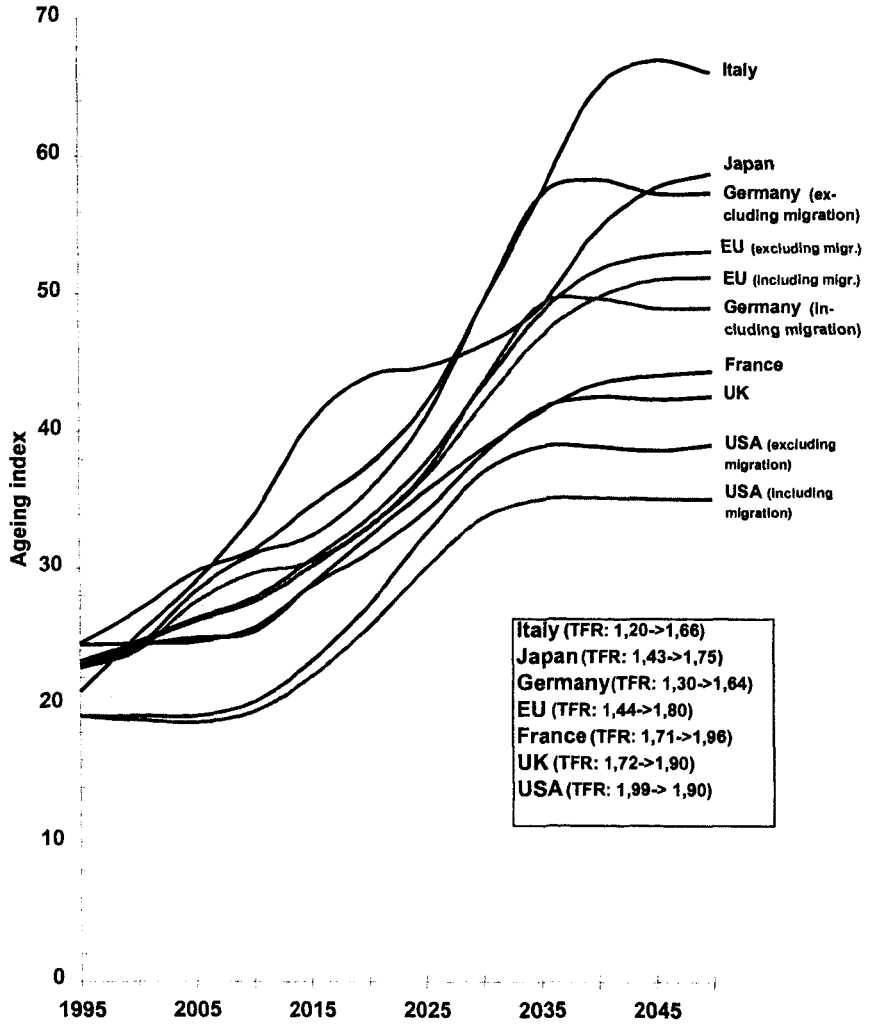
[1] Ageing index = (P(65+) / P(15-65)) * 100; Assumed increase of Total Fertility Rate (TFR) in brackets.
Source: H. Birg; Data base: UN, Replacement migration, medium variant, 2000.

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Figure 9 : Natural population change in EU countries, 15-65 age group (excluding migration), 1998-2050
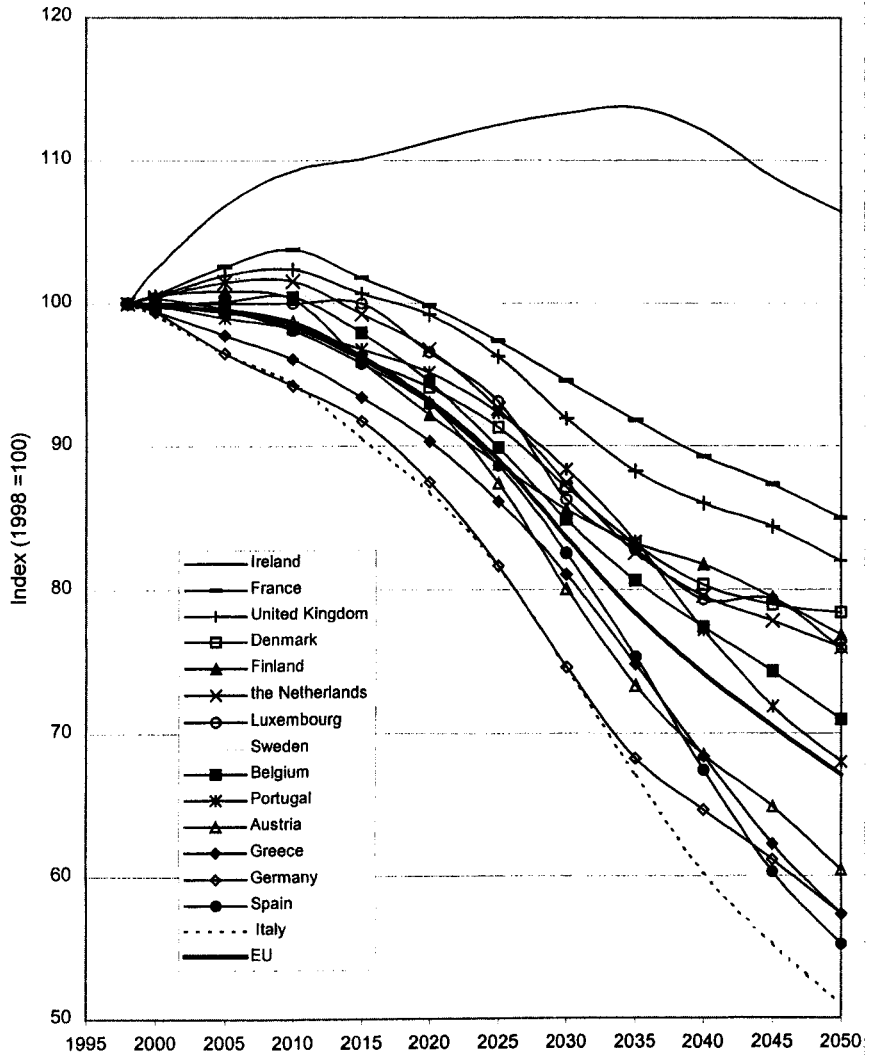
Source: H. Birg, T. Frein and K. Ströker, IBS University of Bielefeld

Figure 10: Natural population change in EU countries, 20-40 age group (excluding migration), 1998-2050

Source: H. Birg, T. Frein and K. Ströker, IBS, University of Bielefeld

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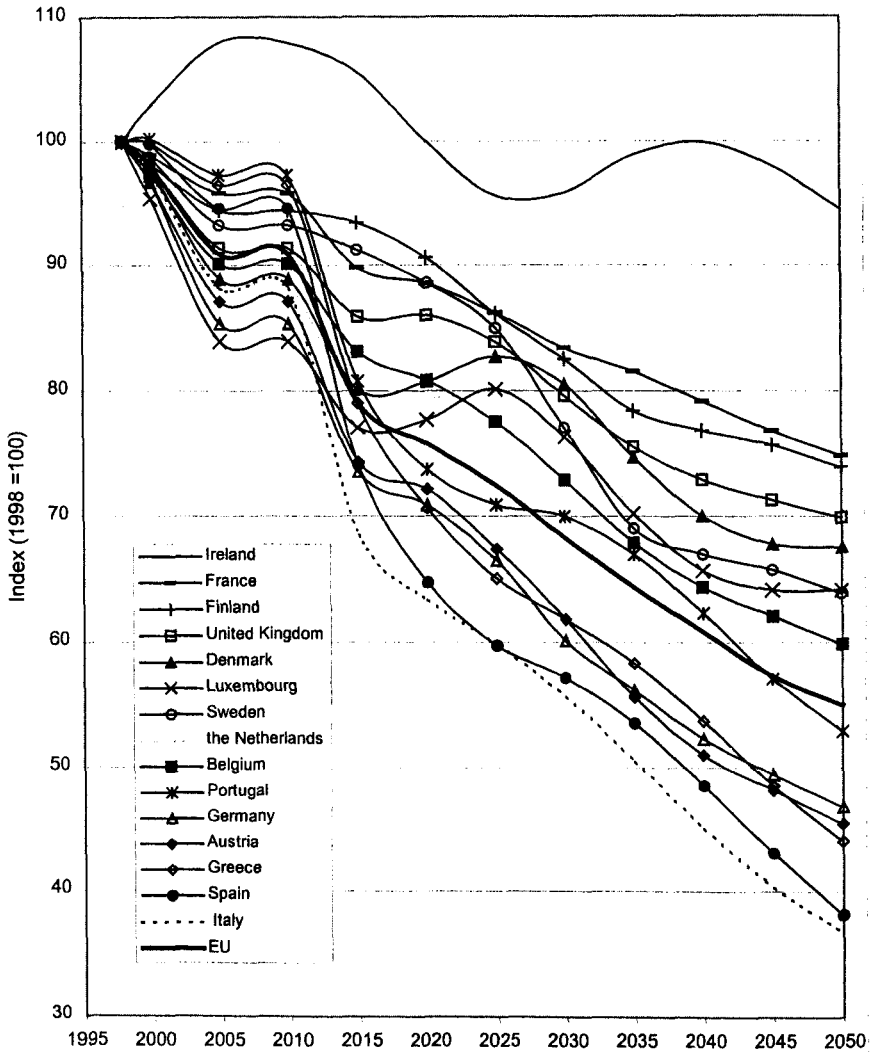
# Figure 11: Population projections for Germany - Variant 1

Number of live births per woman
(Total Fertility Rate) = 1.4

Net number of migrants =
300,000

225,000

150,000

0

Population in millions

120
110
100
90
80
70
60
50
40
30
20
10
0

1995   2005   2015   2025   2035   2045   2055   2065   2075   2085   2095

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Figure 12: Population projections for Germany - Variant 2

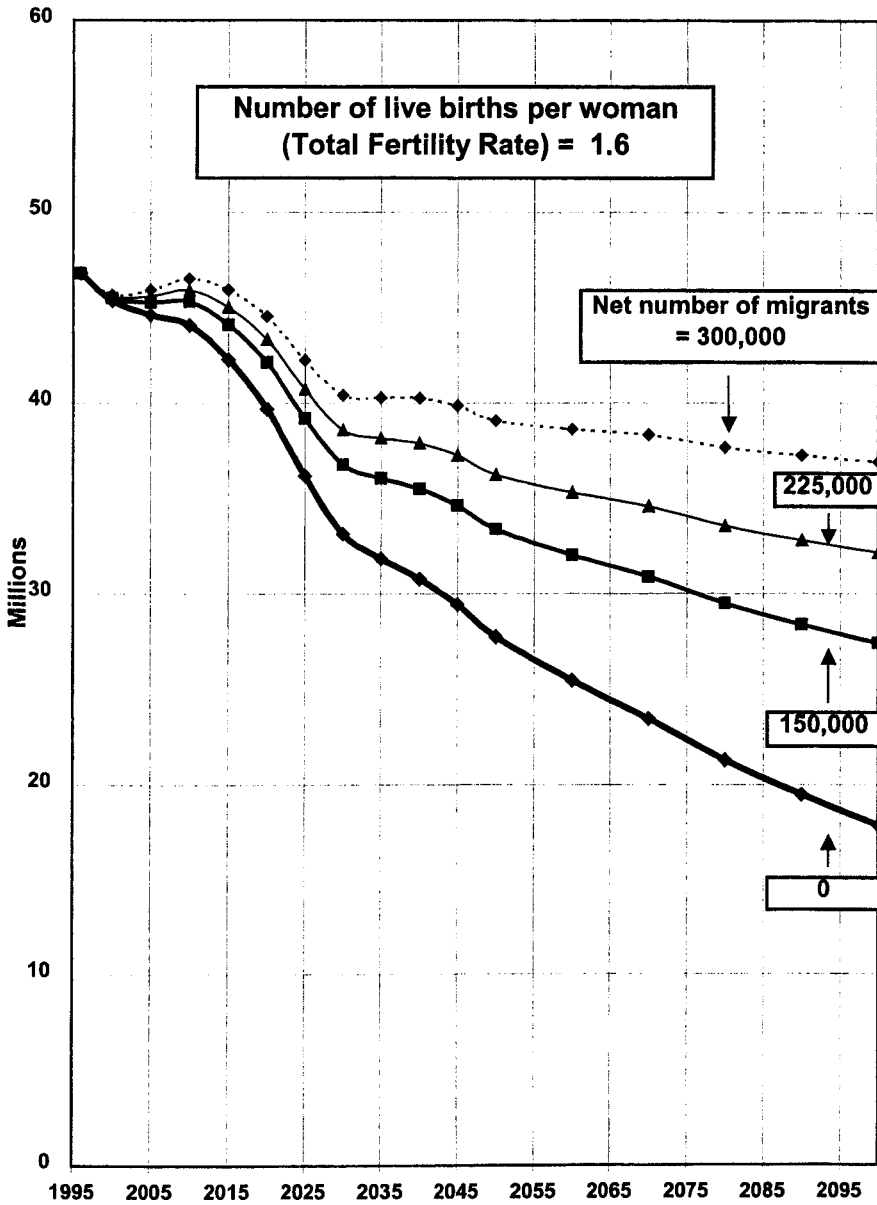**Figure 13: Population projections for Germany - Variant 3**
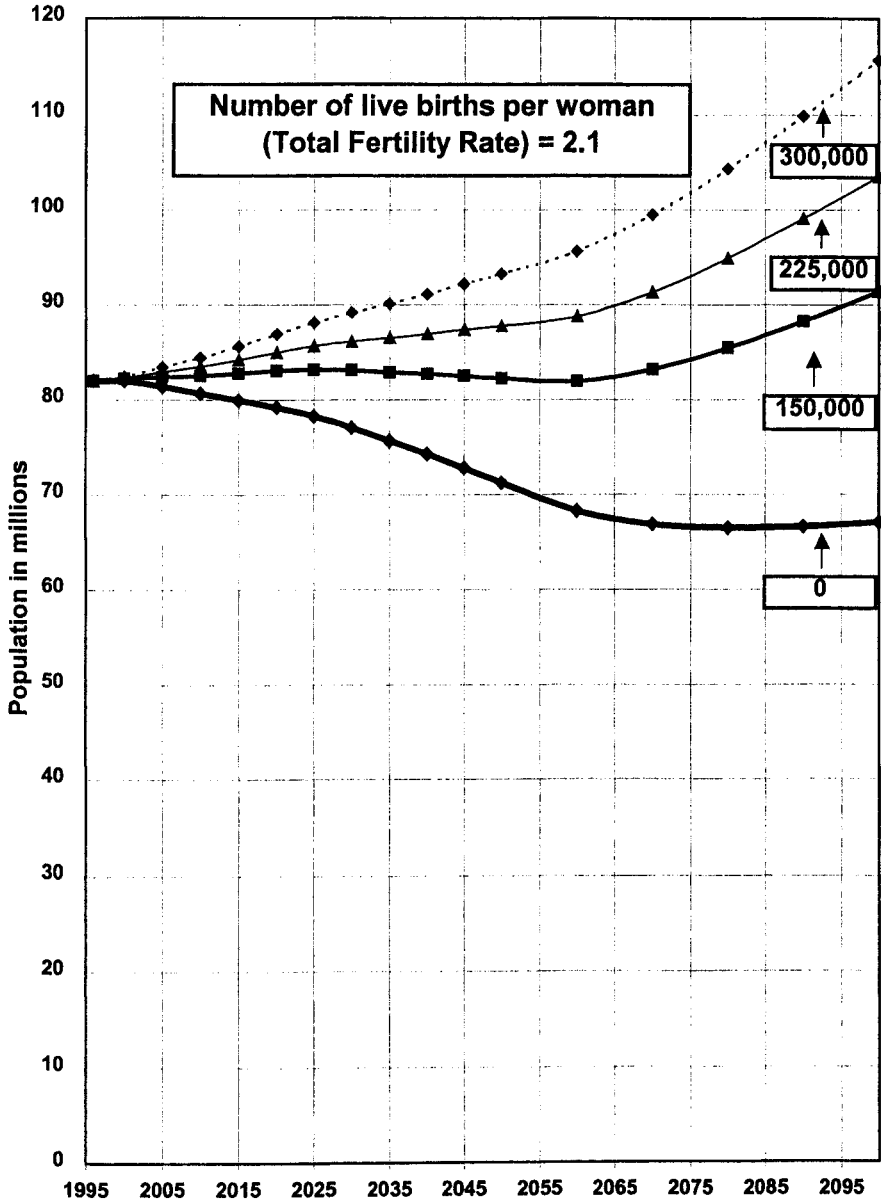
Source: Birg, H./Flöthmann, E,-J./ Frein, T. and Ströker, K.: "Simulationsrechnungen der
Bevölkerungsentwicklung in den alten und neuen Bundesländern im 21 .Jahrhundert"
University of Bielefeld, Bielefeld 1999, IBS-Variants: 25, 28, 31, 34

Figure 14: Population projections for Germany, age group 15-64 - Variant 1
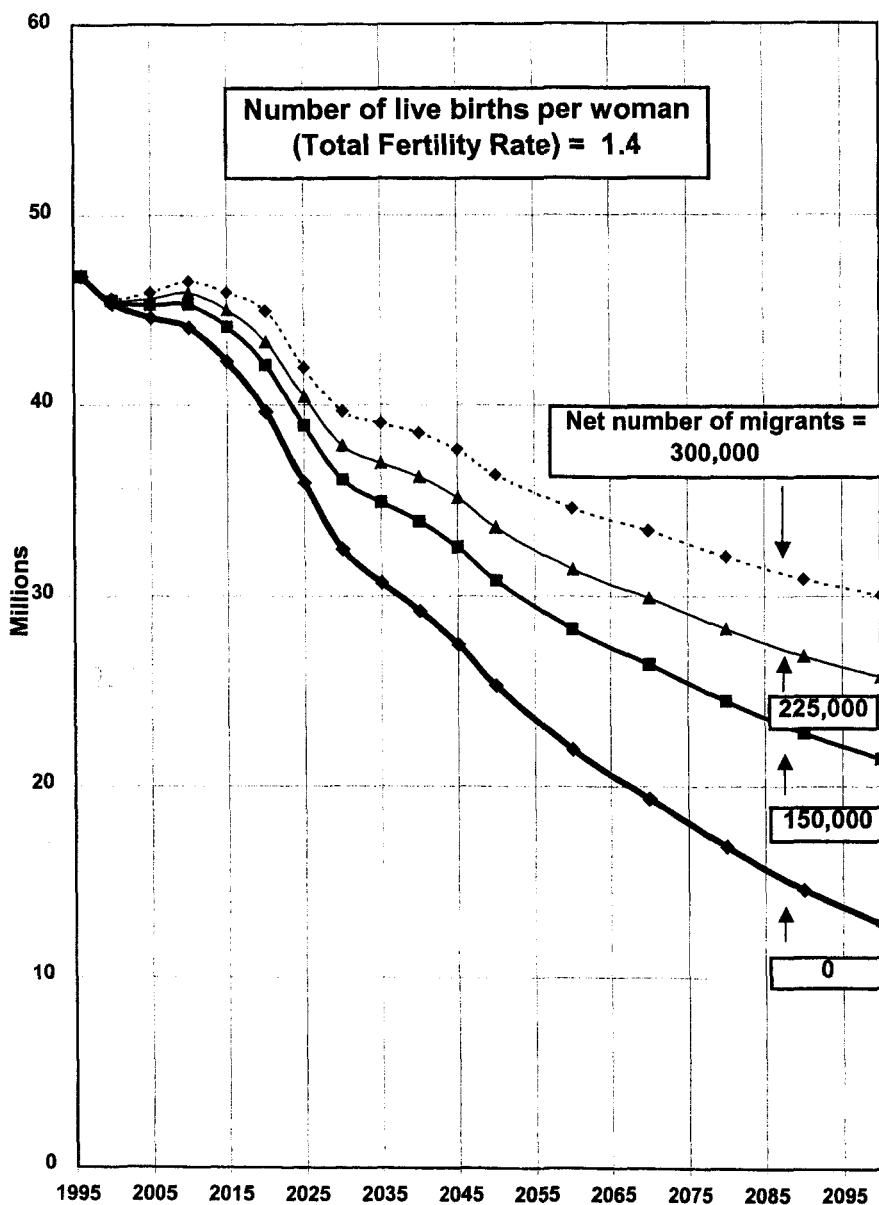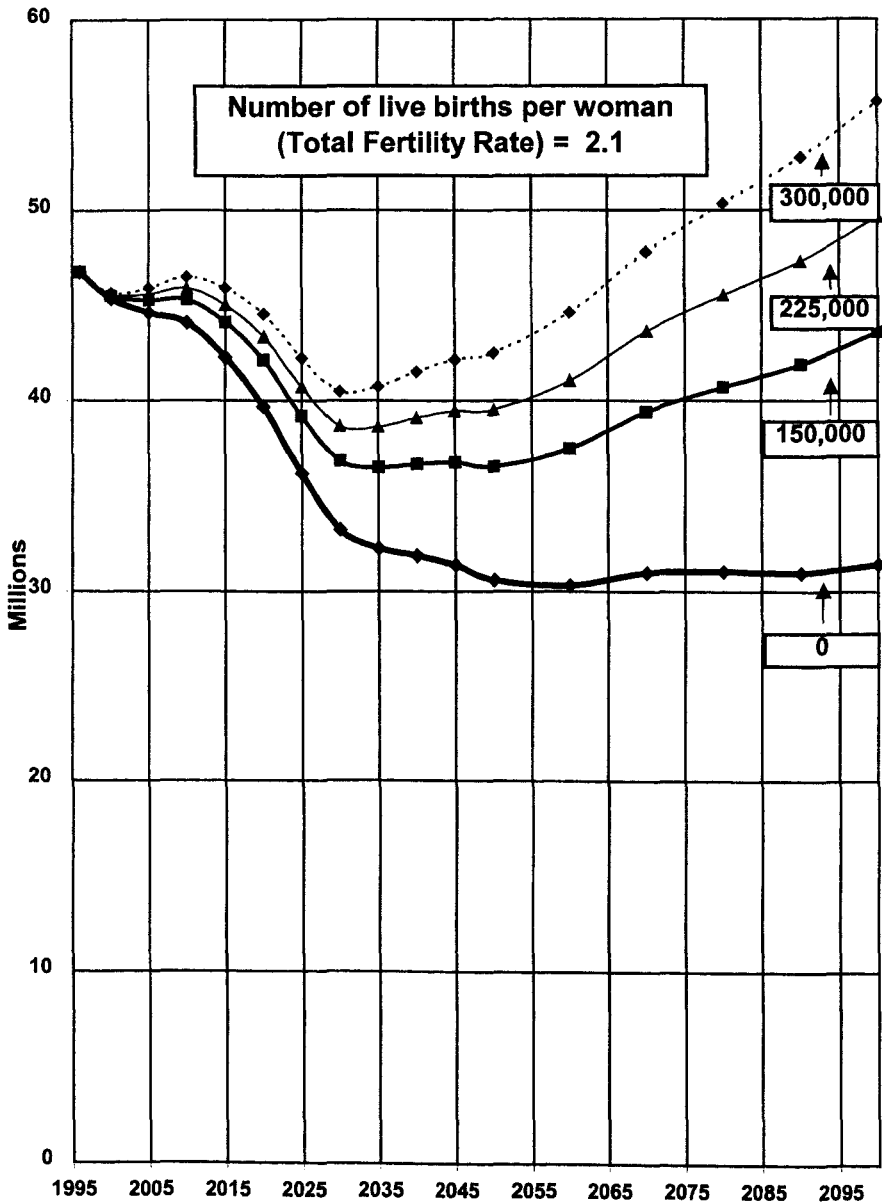

Source: Birg, H./Flöthmann, E.-J./ Frein, T. and Ströker, K.: "Simulationsrechnungen der
Bevölkerungsentwicklung in den alten und neuen Bundesländern im 21 .Jahrhundert"
University of Bielefeld, Bielefeld 1999, IBS-Variants: 1, 4, 7, 10

Figure 15: Population projections for Germany, 15-64 age group - Variant 2

Number of live births per woman
(Total Fertility Rate) = 1.6

Net number of migrants
= 300,000

225,000

150,000

0

Millions

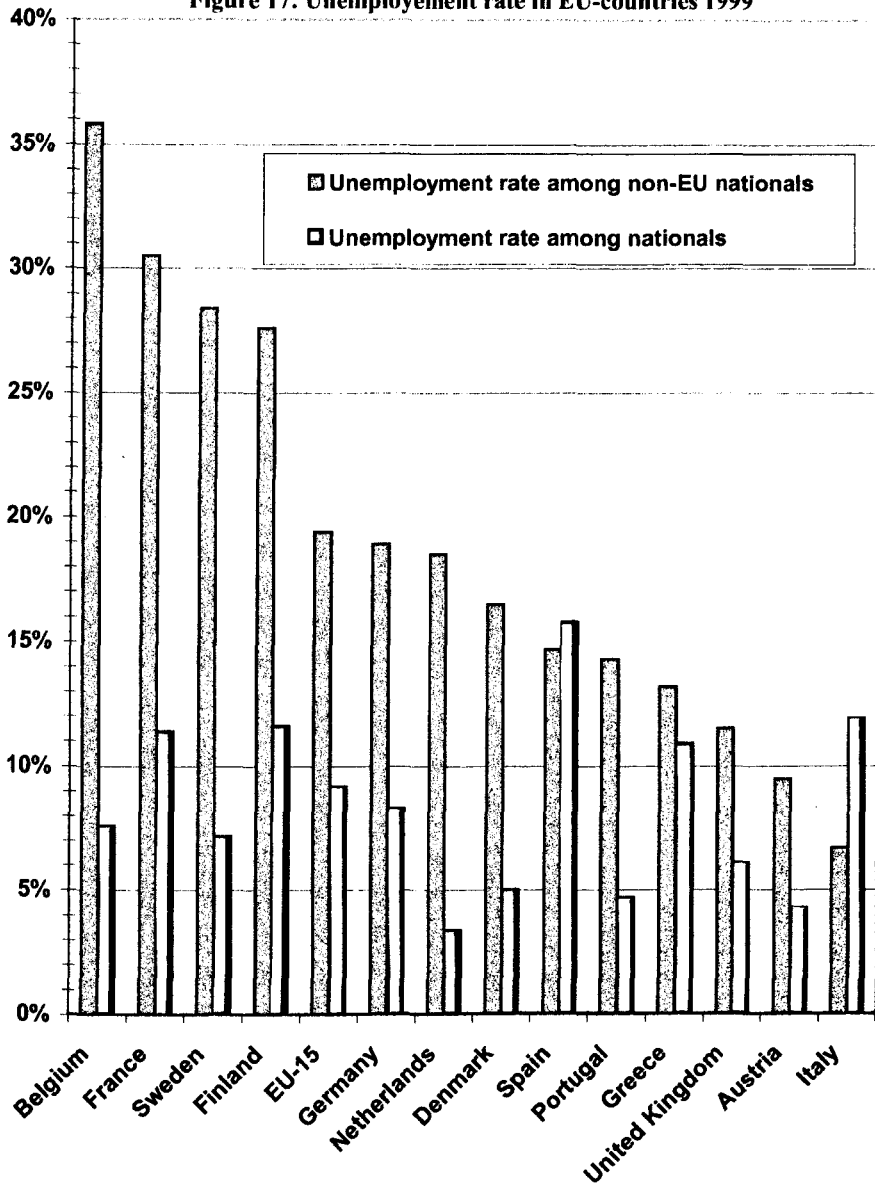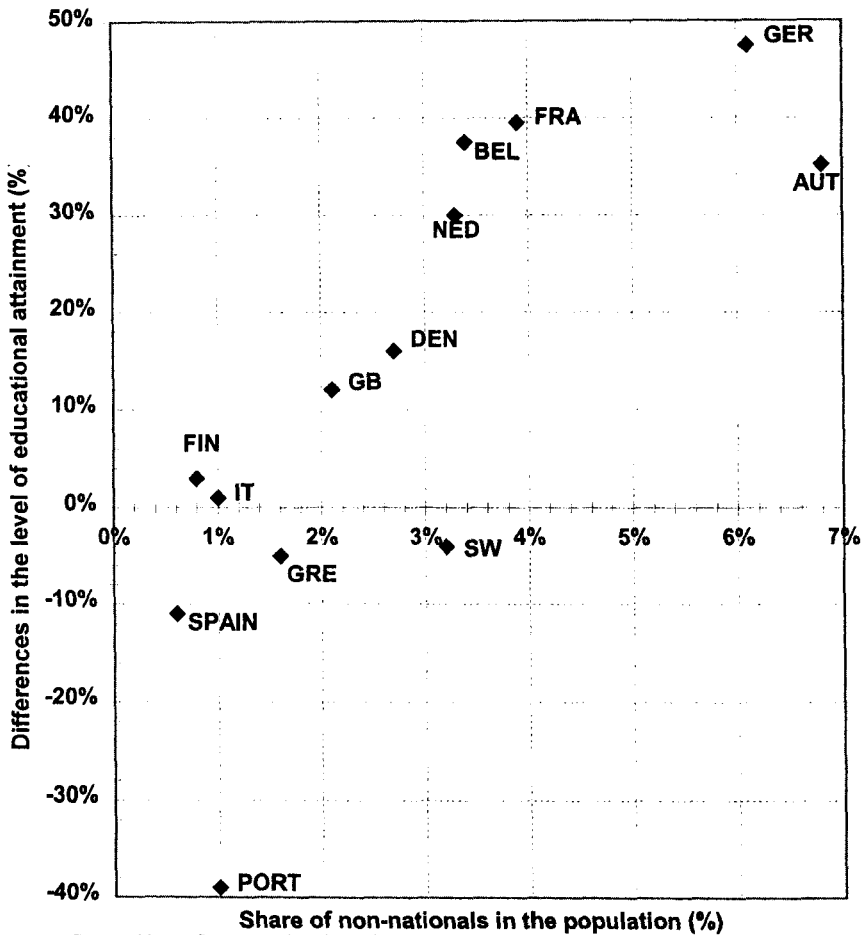1995 2005 2015 2025 2035 2045 2055 2065 2075 2085 2095

Source: Birg, H./Flöthmann, E,-J./ Frein, T. and Ströker, K.: "Simulationsrechnungen der Bevölkerungsentwicklung in den alten und neuen Bundesländern im 21 .Jahrhundert" University of Bielefeld, Bielefeld 1999, IBS-Variants: 13, 16, 19, 22

Figure 16: Population projections for Germany, 15-64 age group - Variant 3

Number of live births per woman
(Total Fertility Rate) = 2.1

300,000

225,000

150,000

0

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Figure 17: Unemployement rate in EU-countries 1999

Legend:
- ▨ Unemployment rate among non-EU nationals
- ▢ Unemployment rate among nationals

Countries (x-axis): Belgium, France, Sweden, Finland, EU-15, Germany, Netherlands, Denmark, Spain, Portugal, Greece, United Kingdom, Austria, Italy

Source: U. van Suntum and D. Schlotböller, Arbeitsmarktintegration von Zuwanderern, Gütersloh 2002.

Figure 18: Non-national's share in population and differences in the level of educational attainment (non-EU-countries)

Source: U. van Suntum and D. Schlotböller, Arbeitsmarktintegration von Zuwanderern, Gütersloh 2002.